



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/679,072

10/03/2003

Rodney Fulton

996258-2

3389

7590 10/30/2008
Camille L. Urban
Brown, Winick, Graves, Gross, Baskerville & Schoenebaum
Regency West5, 4500 Westown Parkway - Ste. 277
West Des Moines, IA 50266

EXAMINER

KWEXXTNSKL RYAND

ART UNIT

PAPER NUMBER

3635

MAIL DATE

DELIVERY MODE

10/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/679,072

Applicant(s)

FULTON ET AL.

Examiner

RYAN D. KWIECINSKI

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-19 and 21-23 is/are pending in the application.
- 4a) Of the above claim(s) 10-12, 17-19 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 13, 15, 16, 21 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3,5-9,13,15, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,299,399 to Baier et al. in view of US 5,993,925 to Zoccole.

Claim 1:

Baier et al. disclose an apparatus for venting ornamental windows covered by a protective panel comprising:

- a) a window (14, Fig.2);
- b) a protective panel (32, Fig.2);
- c) a framing element (K, Exhibit X);
- d) at least one airspace between said window and said protective panel (34, Fig.2);
- e) venting means (40, Fig.2) comprising an entry vent opening (B, Exhibit X) and an exit vent opening (Column 3, lines 13-15) vertically spaced above (Column 3, lines 13-15, the exit vent is in the corner above the entry vent) and on the outside of the apparatus;

f) said entry vent opening comprising a first path (A, Exhibit X) causing a first directional turn upwards and a first interior vent opening (C, Exhibit X) vertically spaced above said entry vent opening (Exhibit X) to said airspace, said exit vent opening comprising a second path and a second interior vent opening vertically spaced below said exit vent opening (if the vents are arranged in the corners of the frame so that they function as entry and exit vents, the second interior opening will be below the exit vent opening) to said airspace for facilitating upwards airflow in said airspace.

Baier et al. also discloses entry vent openings and exit vent openings on the outside of the apparatus (Fig.6).

Baier et al. does not disclose a stained glass window.

Zoccole discloses a stained glass window (10, Fig.2) with a protective panel.

It would have been obvious to construct the apparatus of Baier et al. with the venting means openings on the outside of the apparatus in order to allow the openings to be in direct contact with the surrounding atmosphere. This will enable a sufficient amount of air to enter and exit the vent openings. The air enters the vent and makes a first turn upwards and the second turn into the airspace.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the venting apparatus with a stained glass window. Stained glass windows because of their physical make up are

susceptible to moisture and dirt decay and venting stained glass windows is well known in the art. The stained glass window will add an aesthetic appearance to the window assembly.

With the patent disclosing the structure of a vent in each of the four corners of the framed window, each opening vent pairs with an identical exiting vent. This will be true throughout the entire action when referring to the exit portion of the vents.

Claim 2:

Baier et al. in view of Zoccole disclose an apparatus for venting ornamental windows as claimed in claim 1, Baier et al. also discloses wherein each said entry vent opening further comprises a first area (D, Exhibit Y), said exit vent opening further comprises a second area; said first interior vent opening comprises a third area (E, Exhibit Y) and said second interior vent opening comprises a fourth area; said first path comprises a first cross sectional area (F, Exhibit Y); said second path comprises a second cross sectional area; said first area at least equals said first cross sectional area and said first cross sectional area does not exceed said third area (Referring back to Exhibit X, first area equals the first cross sectional area and the third area exceeds the first cross sectional area); and said second area at least equals said second cross sectional area and said second cross sectional area does not exceed said fourth area for facilitating adequate rate and volume or airflow.

Claim 3:

Baier et al. in view of Zoccole disclose an apparatus for venting ornamental windows as claimed in claim 2, but does not teach where said first area equals at least one square inch for each about 2000 to 2500 square inches of ornamental window to be vented.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created Baier's vent openings and paths large enough to effectively allow air to circulate through the inner space of an ornamental window. For a larger window, there clearly needs to be either larger vent openings or a larger number of vent openings to properly circulate the air through the airspace to prevent moisture from building up in the airspace. The size of the vent opening in comparison to the ornamental window and protective panel was an obvious design choice.

Claim 5:

Baier et al. in view of Zoccole disclose an apparatus for venting ornamental windows as claimed in claim 1, Baier et al. also discloses wherein said first interior vent opening is spaced vertically above said entry vent opening to prevent entry of rainwater into said air space (Exhibit X).

Claim 6:

Baier et al. discloses an apparatus for venting ornamental windows covered by a protective panel comprising:

- a) a window (14, Fig.2);
- b) a protective panel (32, Fig.2);

- c) a framing element (K, Exhibit X);
- d) at least one airspace between said window and said protective panel (34, Fig.2);
- e) venting means (40, Fig.2) comprising a plurality of pairs (Column 3, lines 13-15) of vent openings each said pair with an exit vent spaced vertically above an entry vent opening, said entry vent opening (B, Exhibit X) having a first area (D, Exhibit Y) and said exit vent opening having a second area;
- f) each said entry vent opening comprises a first path (A, Exhibit X) and a first interior opening (C, Exhibit Y) spaced vertically above said entry vent opening (Exhibit X) and each said exit vent opening comprises a second interior opening and a second path; and
- g) for each said entry vent opening, said first interior opening comprises a third area (E, Exhibit Y) and for each said exit vent opening, each said second interior opening comprises a fourth area, each said first path comprises a first cross-sectional area (F, Exhibit Y) and each said second path comprises a second cross-sectional area.

Baier et al. also discloses entry vent openings and exit vent openings on the outside of the apparatus (Fig.6).

Baier et al. does not disclose a stained glass window nor does he disclose the vents being located in the vertical member of the frame.

Zoccole discloses a stained glass window (10, Fig.2).

It would have been obvious to construct the apparatus of Baier et al. with the venting means openings on the outside of the apparatus in the vertical members of the frame in order to allow the openings to be in direct contact with the surrounding atmosphere. This will enable a sufficient amount of air to enter and exit the vent openings. Also since it is obvious to place the openings on the outside of the apparatus, the vent now cause the air to make three directional turns, the air entering the vent, the air turning upward inside of the vent, and the air turning into the air space between the panes. Placing the vent openings in the vertical frame as opposed to the horizontal frame will eliminate the forces in the horizontal direction exerted on the holes formed in the horizontal rail frame members creating a sturdier window assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the venting apparatus with a stained glass window. Stained glass windows because of their physical make up are susceptible to moisture and dirt decay and venting stained glass windows is well known in the art. The stained glass window will add an aesthetic appearance to the window assembly.

Claim 7:

Baier et al. in view of Zoccole disclose an apparatus for venting ornamental windows as claimed in claim 6, Baier et al. also discloses wherein for each said entry vent opening, said first area at least equals first cross sectional area and said first cross sectional area does not exceed said third area, but does

not teach wherein a sum of all said first areas is at least one square inch for every 2000-2500 square inches of ornamental window for facilitating adequate rate and volume of airflow.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have created Baier's vent openings and paths large enough to effectively allow air to circulate through the inner space of an ornamental window. For a larger window, there clearly needs to be either larger vent openings or a larger number of vent openings to properly circulate the air through the airspace to prevent moisture from building up in the airspace. The size of the vent opening in comparison to the ornamental window and protective panel was an obvious design choice.

Claim 8:

Baier et al. in view of Zoccole disclose an apparatus for venting ornamental windows as claimed in claim 7, Baier et al. also discloses wherein for each said exit vent opening, said fourth area at least equals said second cross sectional area and said second cross sectional area does not exceed said second area (Exhibit X and Y).

Claim 9:

Baier et al. discloses an apparatus for venting ornamental windows covered by a protective panel comprising:

- a) a window (14, Fig.2);
- b) a protective panel (32, Fig.2);

c) at least one framing element (K, Exhibit X);

d) at least one airspace between said window and said protective panel (34, Fig.2);

e) venting means (40, Fig.2) comprising at least one pair of vent openings (Column 3, lines 13-15) each pair comprising an entry vent opening (B, Exhibit X) having a first area (D, Exhibit Y) and an exit vent opening having a second area and spaced vertically above (Column 3, lines 13-15, the exit vent is in the corner above the entry vent) said entry vent opening;

f) each said entry vent opening comprises a first proximal path (A, Exhibit X) having a first proximal cross section (F, Exhibit Y), a first inside opening (G, Exhibit X), a first distal path (H, Exhibit X) having a first distal cross section (I, Exhibit Y) and a first interior opening (C, Exhibit X) vertically spaced above said entry vent opening (Exhibit X) all for allowing air to flow into said airspace and each said exit vent opening comprises a second proximal path having a second proximal cross section, a second inside opening, a second distal path having a second distal cross section and a second interior opening vertically spaced below said exit vent opening (if the vents are arranged in the corners of the frame so that they function as entry and exit vents, the second interior opening will be below the exit vent opening) all for allowing air to flow out of said airspace',

g) said first interior opening comprises a third area (E, Exhibit Y) and said second interior opening comprises a fourth area;

h) said first inside opening comprises a fifth area (J, Exhibit Y) and said second inside opening comprises a sixth area;

i) for each said entry vent opening, said first area does not exceed said first proximal cross sectional area, said fifth area at least equals said first proximal cross sectional area, said first distal cross sectional area at least equals said fifth area, and said third area at least equals said first distal cross sectional area (Exhibit X shows the widths of the paths and opening which correspond with the structure in claim 9); and

j) for each said exit vent opening, said fourth area does not exceed said second distal cross sectional area, said sixth area at least equals said second distal cross sectional area, said second proximal cross sectional area at least equals said sixth area and said second area at least equals said second proximal cross sectional area for facilitating adequate rate and volume of flow to minimize the effects of extreme temperatures and of bacterial damage.

Baier et al. also discloses entry vent openings and exit vent openings on the outside of the apparatus (Fig.6).

Baier et al. does not disclose a stained glass window.

Zoccole discloses a stained glass window (10, Fig.2) with a protective panel.

It would have been obvious to construct the apparatus of Baier et al. with the venting means openings on the outside of the apparatus in order to allow the openings to be in direct contact with the surrounding atmosphere. This will

enable a sufficient amount of air to enter and exit the vent openings. Also since it is obvious to place the openings on the outside of the apparatus, the vent now cause the air to make three directional turns, the air entering the vent, the air turning upward inside of the vent, and the air turning into the air space between the panes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the venting apparatus with a stained glass window. Stained glass windows because of their physical make up are susceptible to moisture and dirt decay and venting stained glass windows is well known in the art. The stained glass window will add an aesthetic appearance to the window assembly.

Claim 13:

Baier et al. in view of Zoccole discloses the apparatus for venting ornamental windows as claimed in claim 9, Baier et al. also discloses wherein said at least one framing element is a perimeter frame which holds only said protective panel (K, Exhibit X) and said airspace is defined by a separation between said protective panel and said ornamental window.

Claim 15:

Baier et al. in view of Zoccole discloses the apparatus for venting ornamental windows as claimed in claim 9, Baier et al. also discloses wherein at least one of said entry vent openings includes a debris deterring accessory (36, Fig.2 or 72, Fig.13).

Claim 21:

Baier et al. in view of Zoccole discloses the apparatus for venting ornamental windows as claimed in claim 9, Baier et al. also discloses wherein at least one of said entry vent openings includes a debris deterring accessory (36, Fig.2 or 72, Fig.13).

Claims 4, 16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,299,399 to Baier et al. in view of US 5,993,925 in view of USPN 4,656,803 to Chludil.

Claim 4:

Baier et al. in view of Zoccole discloses the apparatus for venting ornamental windows as claimed in claim 9, but does not disclose wherein said entry vent opening is covered by a screen such that is has an effective first area of 66% such that said first area at least equals 1.66 square inches for each about 2000 to 2500 square inches of ornamental window.

Chludil teaches wherein said entry vent opening is covered by a screen (Fig.2) such that is has an effective first area of 66% such that said first area at least equals 1.66 square inches for each about 2000 to 2500 square inches of ornamental window.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have covered Baier's venting means with a screen to

deter debris and insects from entering the vent openings. Using a screen to deter debris and insects from entering an opening is notoriously well known in the art and would have been an obvious design choice. It would have also been obvious to have created Baier's vent openings and paths large enough to effectively allow air to circulate through the inner space of an ornamental window. For a larger window, there clearly needs to be either larger vent openings or a larger number of vent openings to properly circulate the air through the airspace to prevent moisture from building up in the airspace. The size of the vent opening in comparison to the ornamental window and protective panel was an obvious design choice.

Claims 16 and 23:

Baier et al. in view of Zoccole discloses the apparatus for venting ornamental windows as claimed in claim 9 and as claimed in claim 13, but does not disclose wherein said debris deterring accessory is a screen or further comprising at least one screen proximal one of said entry vent openings for deterring entry of debris.

Chludil teaches wherein said debris deterring accessory is a screen (Fig.2) or further comprising at least one screen proximal one of said entry vent openings for deterring entry of debris (S, Fig.1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have covered Baier's venting means with a screen to deter debris and insects from entering the vent openings. Using a screen to

deter debris and insects from entering an opening is notoriously well known in the art and would have been an obvious design choice.

Response to Arguments

Applicant's arguments filed 29 May 2008 have been fully considered but they are not persuasive.

Applicant argues that the limitation "second directional turn to said airspace" is not addressed in the rejection. As stated by the Applicant, the previous rejection clarifies that the vent of Baier has a vent with a directional turn upwards and a second directional turn of the air when the air enters the airspace. Once the air is sent vertical by the first turn, the air will turn once the air enters the airspace completely filling the airspace above in Baier's window panel system.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Baier shows in Figure 6, a ventilation system that has the opening on the outside of the window apparatus. Also Baier shows in Figure 2, a ventilation system which also has an opening on the outside of the apparatus which is simply a cover to

shield the opening of the vent as well as secure the glazing in the system. The ventilation system according to Baier (Column 2, lines 35-41) is still in contact with the outside ambient air. A combination of a teaching of prior art which discloses a ventilation system that which had its opening on the outer side of the apparatus and a teaching of Baier which discloses the vent opening in contact with the outside ambient air would not warrant improper hindsight. Also the air would make three directional turns when proceeding through the ventilation system of Baier. The air would turn to enter the ventilation system, since not all air is going to enter the vent directly into the opening, the air will make a directional turn upwards in the ventilation system, and then the air will make a direction turn filling the airspace of the system of Baier.

Applicant goes on to argue about the size of the vent openings and the areas of the passageways of the vents. Baier et al. disclose the ratio of the areas recited in claims 2 and 7, but they do not directly disclose the ratio of the sizes of the vents to the size of the window. This is an obvious design choice, the vent openings and paths of the vent should be large enough to effectively allow air to circulate through the inner space of an ornamental window. For a larger window, there clearly needs to be either larger vent openings or a larger number of vent openings to properly circulate the air through the airspace to prevent moisture from building up in the airspace. Further Protective Glazing Study submitted with the IDS clearly shows that many different factors are considered when studying to find out if the ventilation is appropriate for the window. It goes on to talk about how there are different thoughts about the effects of the size of the window openings (page 98, paragraph 2). Further the study shows that

"venting needs of particular windows may vary greatly. The amount of venting required is dependent on the window's micro-environment" and also "there are no set specifications to determine the exact amount of venting. One must use common sense, and be willing to constantly review the results of past work." (Page 99, Paragraph 5). Nowhere in the documents does it disclose the size of the vents that the Applicant claims to be critical. Therefore Applicant's arguments are not persuasive and the rejection is upheld.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN D. KWIECINSKI whose telephone number is

(571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Basil Katcheves can be reached on (571)272-6846. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDK

/Ryan D Kwiecinski/
Examiner, Art Unit 3635

/Basil Katcheves/

Primary Examiner, Art Unit 3635